

## DECOUPLED VECTOR ARCHITECTURE

### Abstract

In a computer system having a scalar processing unit and a vector processing unit, a system and method of executing a vector memory instruction having a scalar operand, the method comprising reading the scalar operand, wherein reading includes transferring the scalar operand from the scalar processing unit to the vector dispatch unit, determining if the vector memory instruction is scalar committed and if the vector memory instruction is scalar committed, executing the vector memory operation as a function of the scalar operand.